

Anti-ACTH Picoband Antibody
Catalog # ABO11762**Specification****Anti-ACTH Picoband Antibody - Product Information**

Application	IHC-P
Primary Accession	P01189
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for Pro-opiomelanocortin(POMC) detection. Tested with IHC-P in Human;Mouse;Rat.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-ACTH Picoband Antibody - Additional Information

Gene ID 5443

Other Names

Pro-opiomelanocortin, POMC, Corticotropin-lipotropin, NPP, Melanotropin gamma, Gamma-MSH, Potential peptide, Corticotropin, Adrenocorticotrophic hormone, ACTH, Melanotropin alpha, Alpha-MSH, Corticotropin-like intermediary peptide, CLIP, Lipotropin beta, Beta-LPH, Lipotropin gamma, Gamma-LPH, Melanotropin beta, Beta-MSH, Beta-endorphin, Met-enkephalin, POMC

Calculated MW

29424 MW KDa

Application Details

Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Mouse, Rat, Human, By Heat

Subcellular Localization

Secreted.

Tissue Specificity

ACTH and MSH are produced by the pituitary gland.

Protein Name

Pro-opiomelanocortin

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg NaN₃.

Immunogen

A synthetic peptide corresponding to a sequence in the middle region of human ACTH(138-176aa

SYSMEHFRWGKPVGKKRRPVKVYPNGAEDESAAFPLEF), different from the related mouse and rat sequences by two amino acids.

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins

Storage

At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

Sequence Similarities

Belongs to the POMC family.

Anti-ACTH Picoband Antibody - Protein Information

Name POMC

Function

[Corticotropin]: Stimulates the adrenal glands to release cortisol. [Melanocyte-stimulating hormone beta]: Increases the pigmentation of skin by increasing melanin production in melanocytes. [Met-enkephalin]: Endogenous opiate.

Cellular Location

Secreted {ECO:0000250|UniProtKB:P01193}. Note=Melanocyte-stimulating hormone alpha and beta-endorphin are stored in separate granules in hypothalamic POMC neurons, suggesting that secretion may be under the control of different regulatory mechanisms {ECO:0000250|UniProtKB:P01193}

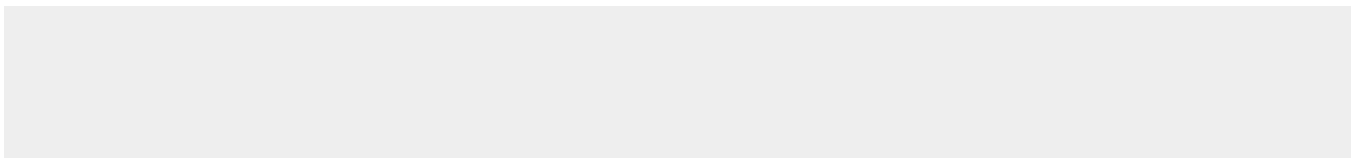
Tissue Location

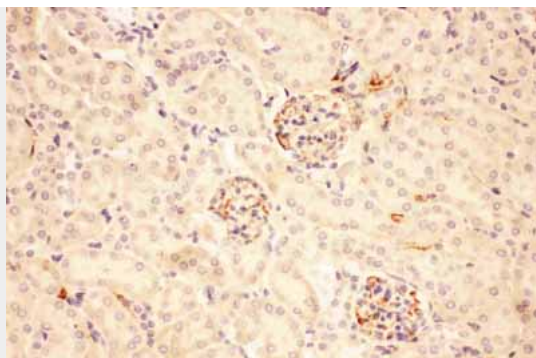
ACTH and MSH are produced by the pituitary gland.

Anti-ACTH Picoband Antibody - Protocols

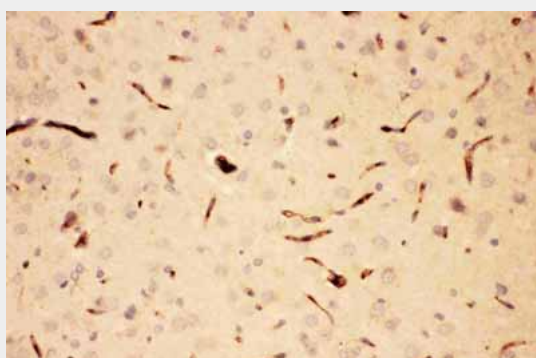
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

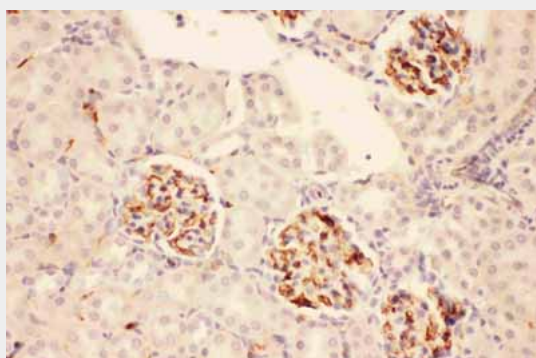
Anti-ACTH Picoband Antibody - Images



Anti-ACTH Picoband antibody, ABO11762-1.JPGIHC(P): Mouse Kidney Tissue



Anti-ACTH Picoband antibody, ABO11762-2.JPGIHC(P): Rat Brain Tissue



Anti-ACTH Picoband antibody, ABO11762-3.JPGIHC(P): Rat Kidney Tissue

Anti-ACTH Picoband Antibody - Background

Adrenocorticotrophic hormone (ACTH), also known as corticotropin, is a polypeptide tropic hormone produced and secreted by the anterior pituitary gland. It is an important component of the hypothalamic-pituitary-adrenal axis and is often produced in response to biological stress (along with its precursor corticotropin-releasing hormone from the hypothalamus). Its principal effects are increased production and release of corticosteroids. ACTH stimulates secretion of glucocorticoid steroid hormones from adrenal cortex cells, especially in the zona fasciculata of the adrenal glands. This gene can influence steroid hormone secretion by both rapid short-term mechanisms that take place within minutes and slower long-term actions. Besides, ACTH also enhances transcription of mitochondrial genes that encode for subunits of mitochondrial oxidative phosphorylation systems.